Utah EMSC

2006 Needs Assessment Results

Purpose of Needs Assessment

1) Assess EMS Providers' perception of the delivery of EMS to children within our state

2) Determine how Utah EMSC can best meet the needs of EMS providers

Our Approach

- 30 question survey comprised of open ended and closed ended questions
- Stratified random sample of 624 EMS providers throughout the state.
- Mailed paper survey with $1 bill as an incentive to complete
- 266 surveys returned for a 43% return rate
- NEDARC, NEDARC, NEDARC !!!

  Helped ensure questions were appropriate

  Selected random sample

  Entered data

  Ran statistical analysis and assisted with qualitative analysis

Our Results: Demographic

- Surveys returned from all counties in Utah

- Response rate by certification level

  EMT-B 35%, EMT-I 39%, Paramedic 26%

- Response rate by area

  36% Rural (28% sample), 64% Urban (72% sample)

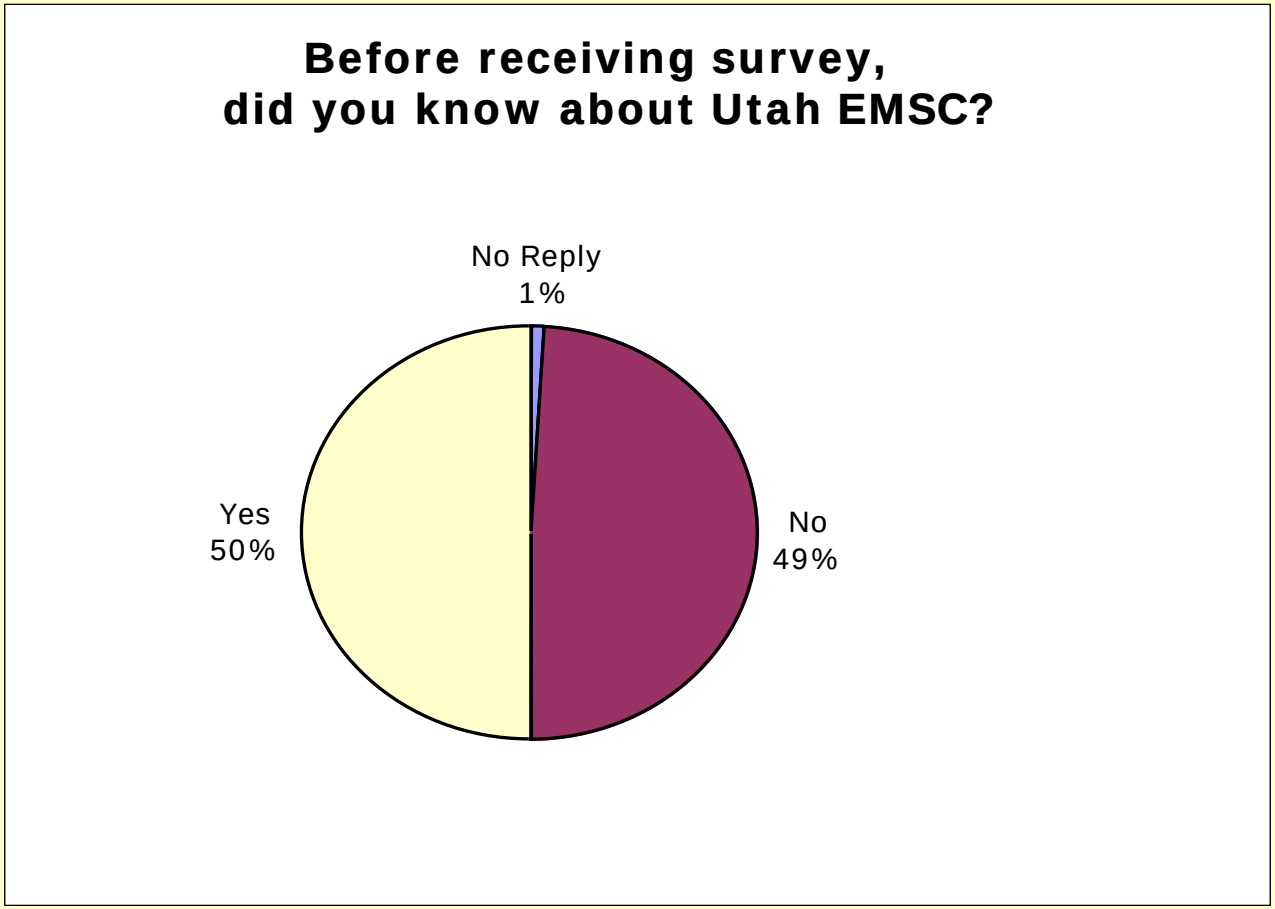
- Median years certified

  EMT-B 13.5 years, EMT-I 8 years, Paramedic 9.5

The Results

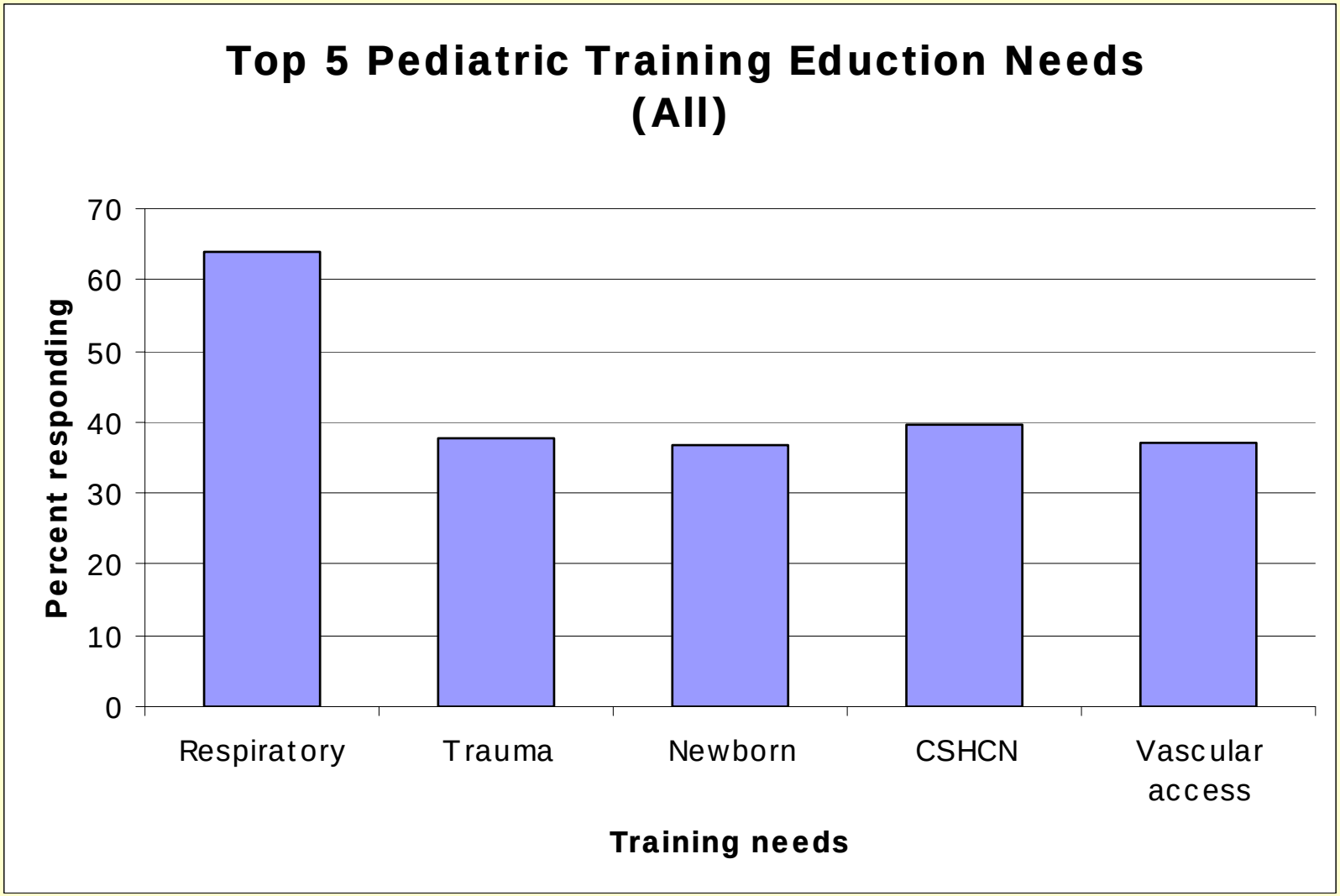
- Awareness of EMSC
- Education needs of EMS providers
- Pediatric equipment
- CSHCN
- Cultural Competence
- Injury Prevention
- Top 3 wish list items

Awareness of EMSC



No difference found between Urban and Rural EMS Providers.

Education: Needs for EMS Providers



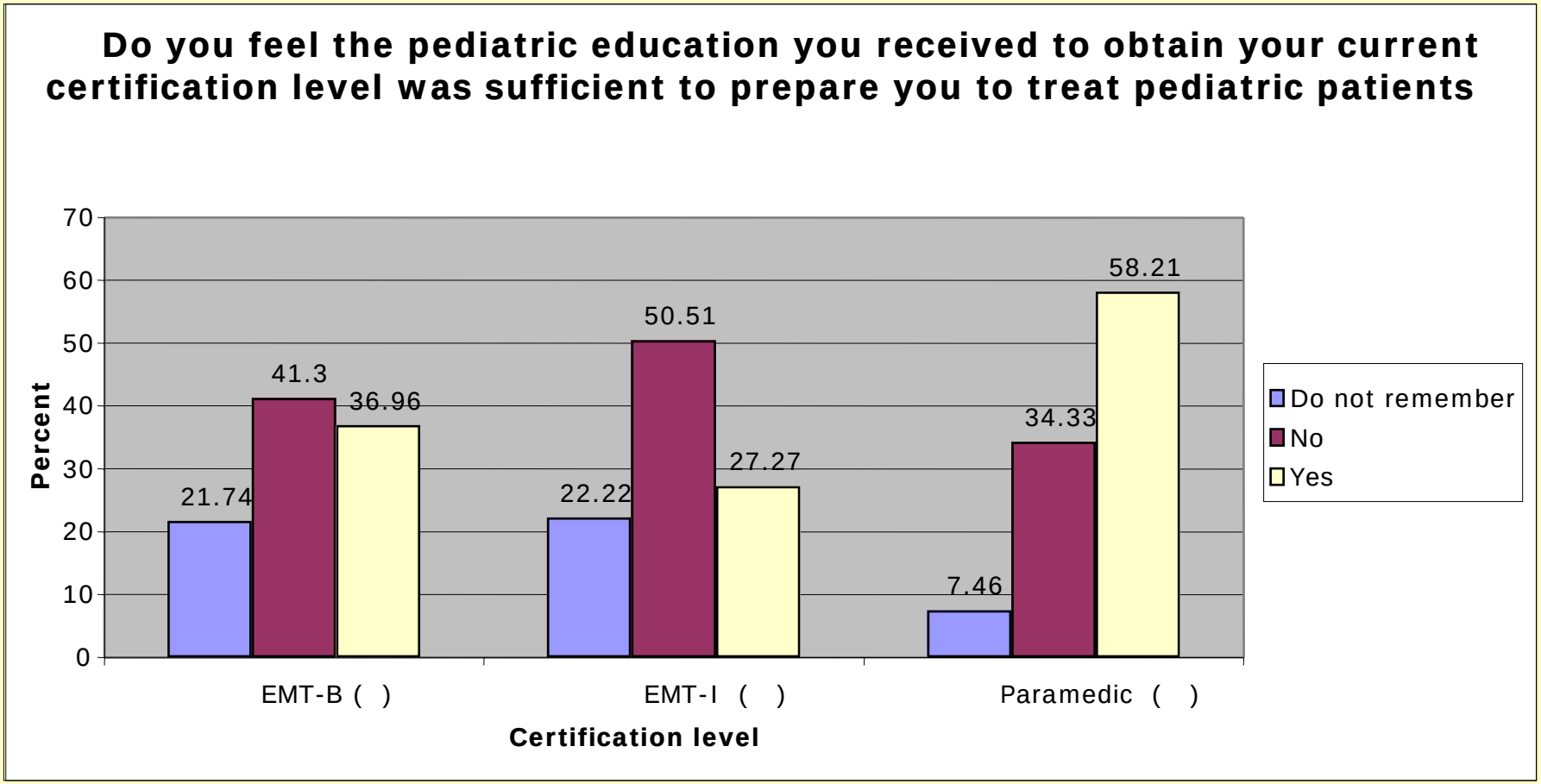
Education: Needs for EMS Providers

Rural	Urban
1. Respiratory	1. Respiratory
2. Vascular access	2. CSHCN
3. Airway Management	3. Trauma
4. Medical Emergencies	4. Newborn
5. ALS Considerations	5. Vascular Access

Education: Needs for EMS Providers

EMT-B	EMT-I	Paramedic
1. Respiratory Emergencies	1. Respiratory Emergencies	1. Respiratory Emergencies
2. Trauma	2. Vascular access / Fluid Management	2. Newborn
3. CSHCN	3. Airway Management	3. CSHCN
4. Newborn	4. Trauma	4. Vascular access/ Fluid Management
5. Seizures	5. CSHCN	5. ALS Considerations

Education: Satisfaction with Original Pediatric Training



EMT-I s were more likely to feel that their original training to obtain their current certification level was not sufficient to prepare them to treat pediatric patients.

Education: Satisfaction with Original Pediatric Training

What pediatric topics were not covered but you feel were needed during the education to obtain your current certification level?

1. The topics that should have been covered during their education
2. The amount of time that was spent on pediatrics during their education
3. Teaching methods used for training.

1. Topics providers felt should have been covered in their initial education

- Medical emergencies
- Trauma
- Assessment of a pediatric patient
- Medication for pediatric patients
- Packaging
- CSHCN
- Adults vs. pediatrics
- Psychosocial issues involved with dealing with children

“You're never prepared to handle the emotional aspect of treating children”.

“Most of the education has had to come from hands on with peds. Their emotional as well as physical well-being is often not addressed in classes. This I feel has very long reaching effect in their recovery.”

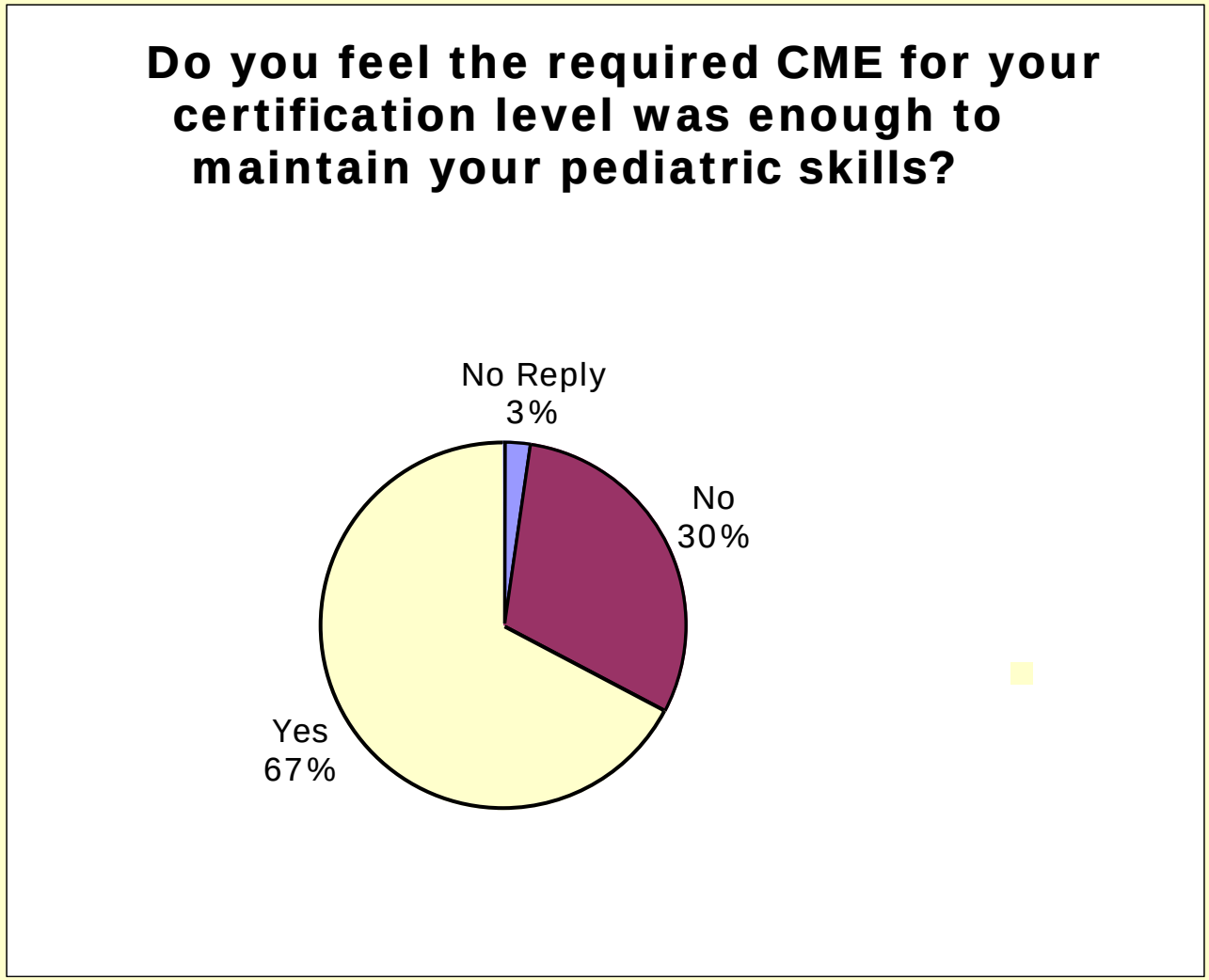
2 & **3**: The amount of time spent on pediatrics and the teaching methods used for training.

- *"The training covered just the surface" and "feel like Peds was just (a) brush over.*

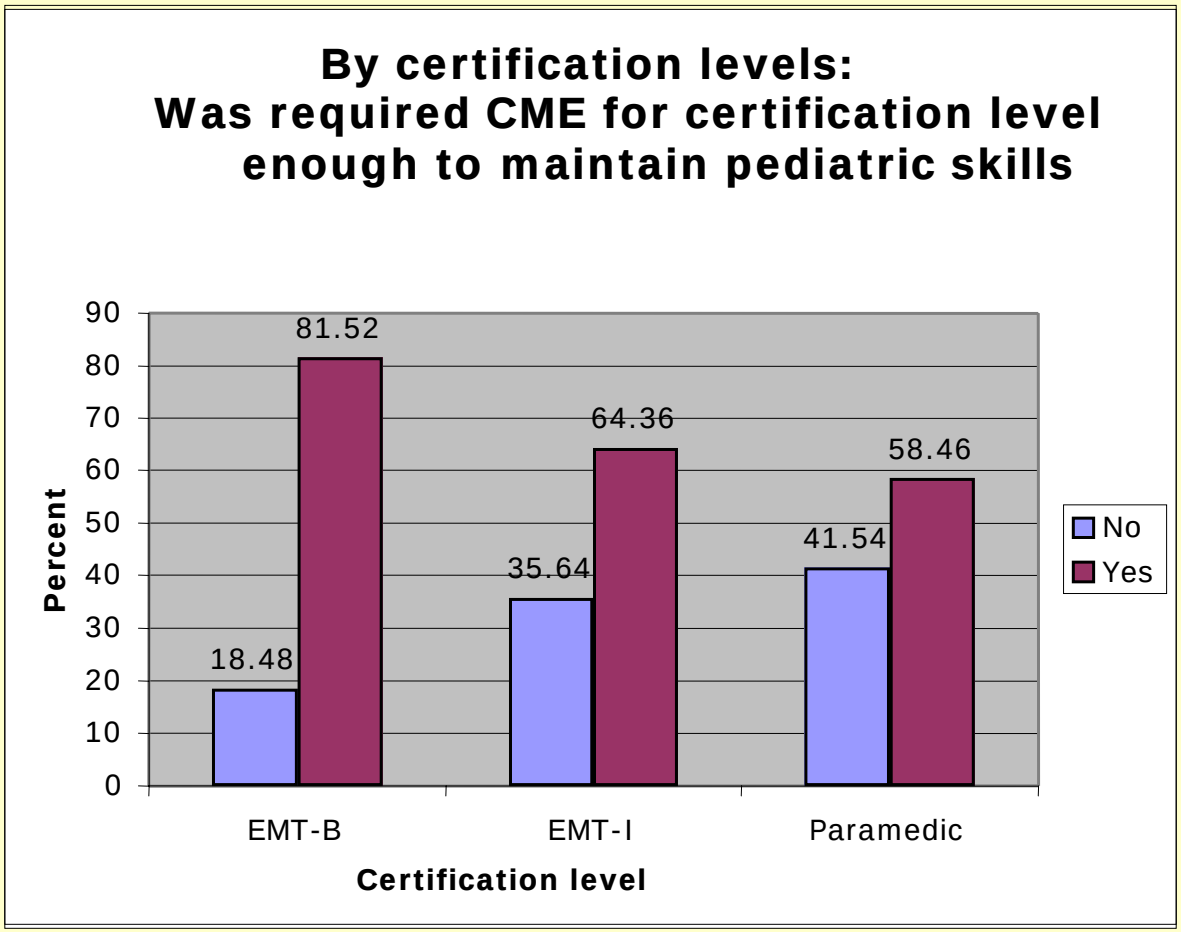
- *"In training it seemed we did not spend as much time as we could have on all PED Topics. What stands out the most is actual hands on assessments of PEDS. Class lectures and manikins are not the same as having to deal with sick or injured PEDS. Perhaps in the future or in CME's - Pediatric Assessment skills and related topics with stress on pediatric interaction?"*

- *"Everything was covered on an educational level - I swear nothing takes the place of hands on experience"*

Education: Continuing Medical Education



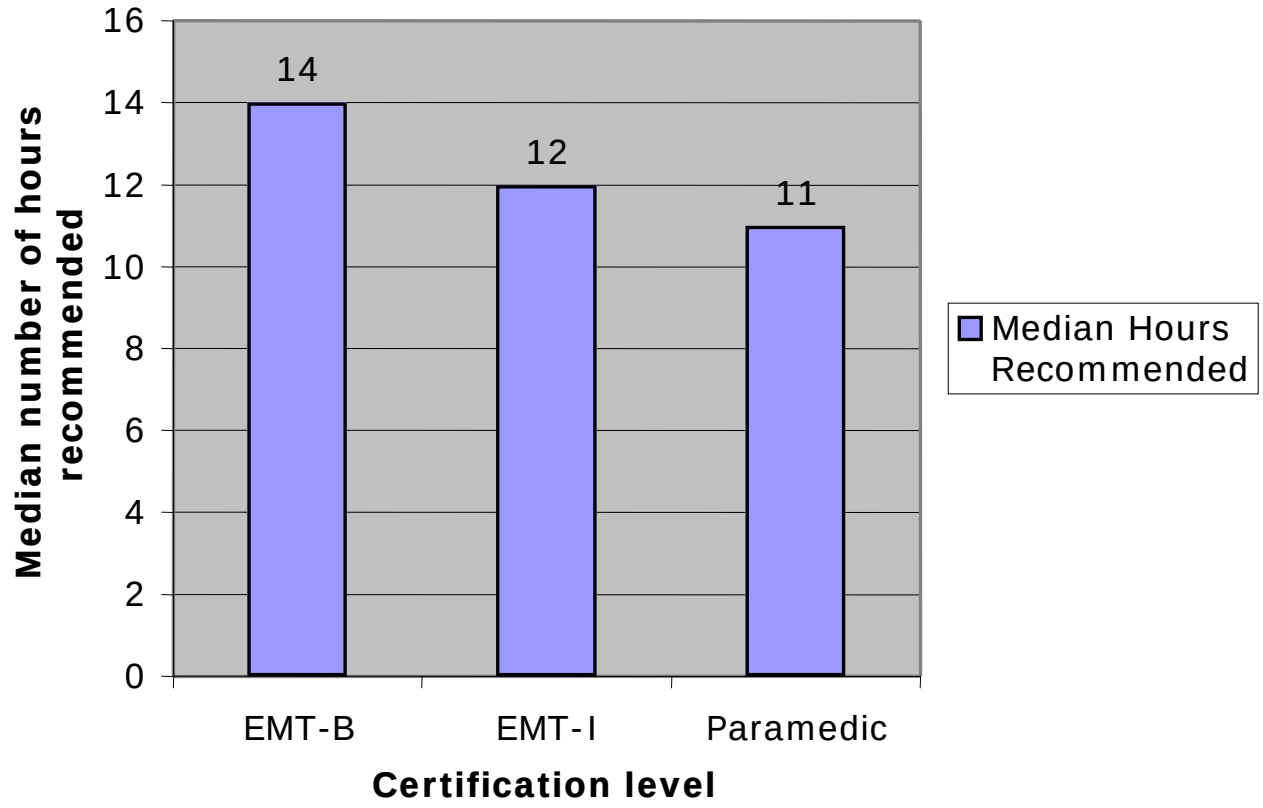
Education: Continuing Medical Education



EMT-B were more likely to feel that the required CME for their certification level **was sufficient** to maintain their pediatric skills.

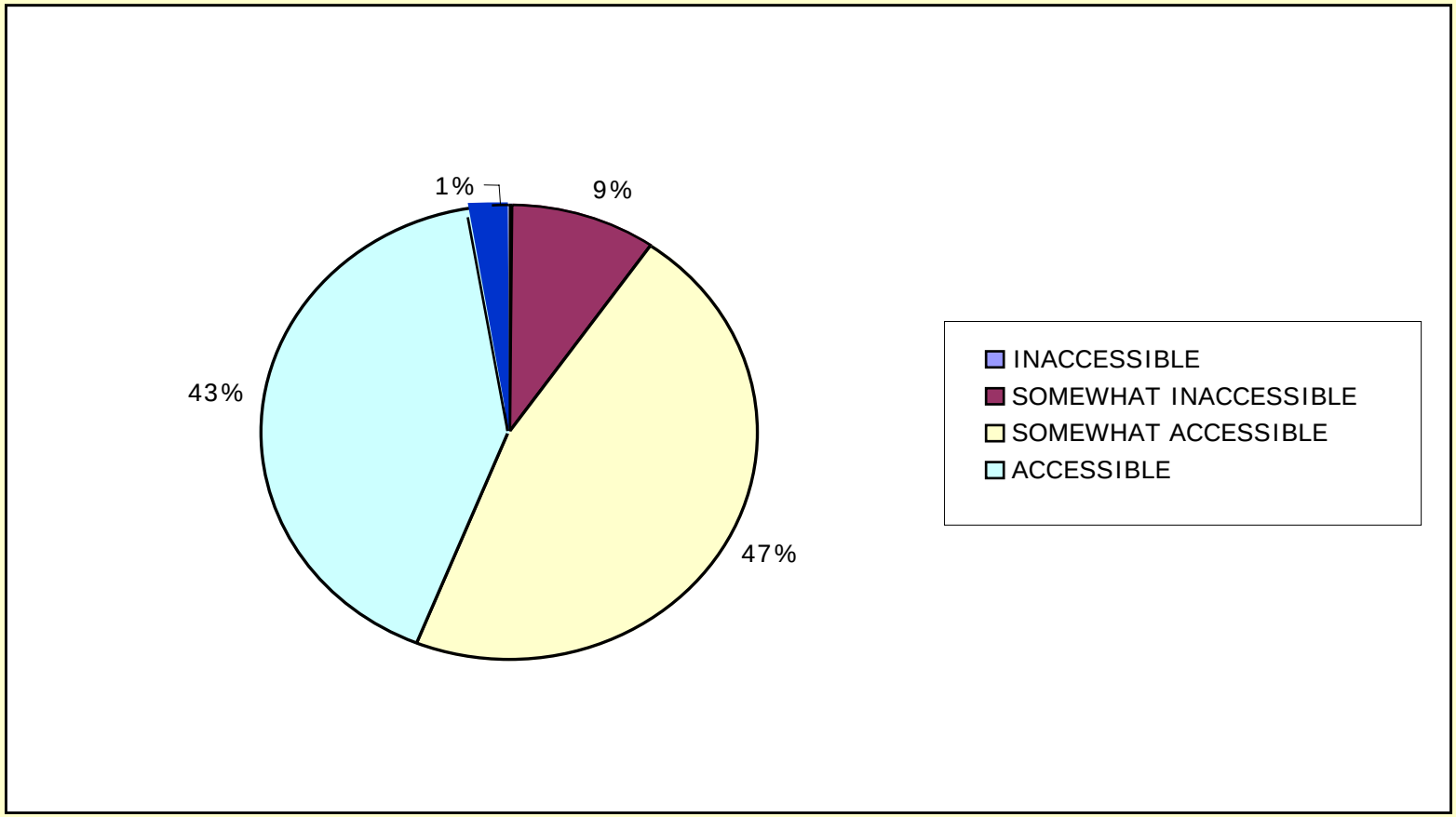
EMT-Is were more likely to feel that the required CME for their certification level **was insufficient** to maintain their pediatric skills.

Part B: If no, how many hours of CME would you recommend?



Education: Accessibility of Pediatric CME

90 % of respondents felt that pediatric CME was accessible



Easy to obtain CME

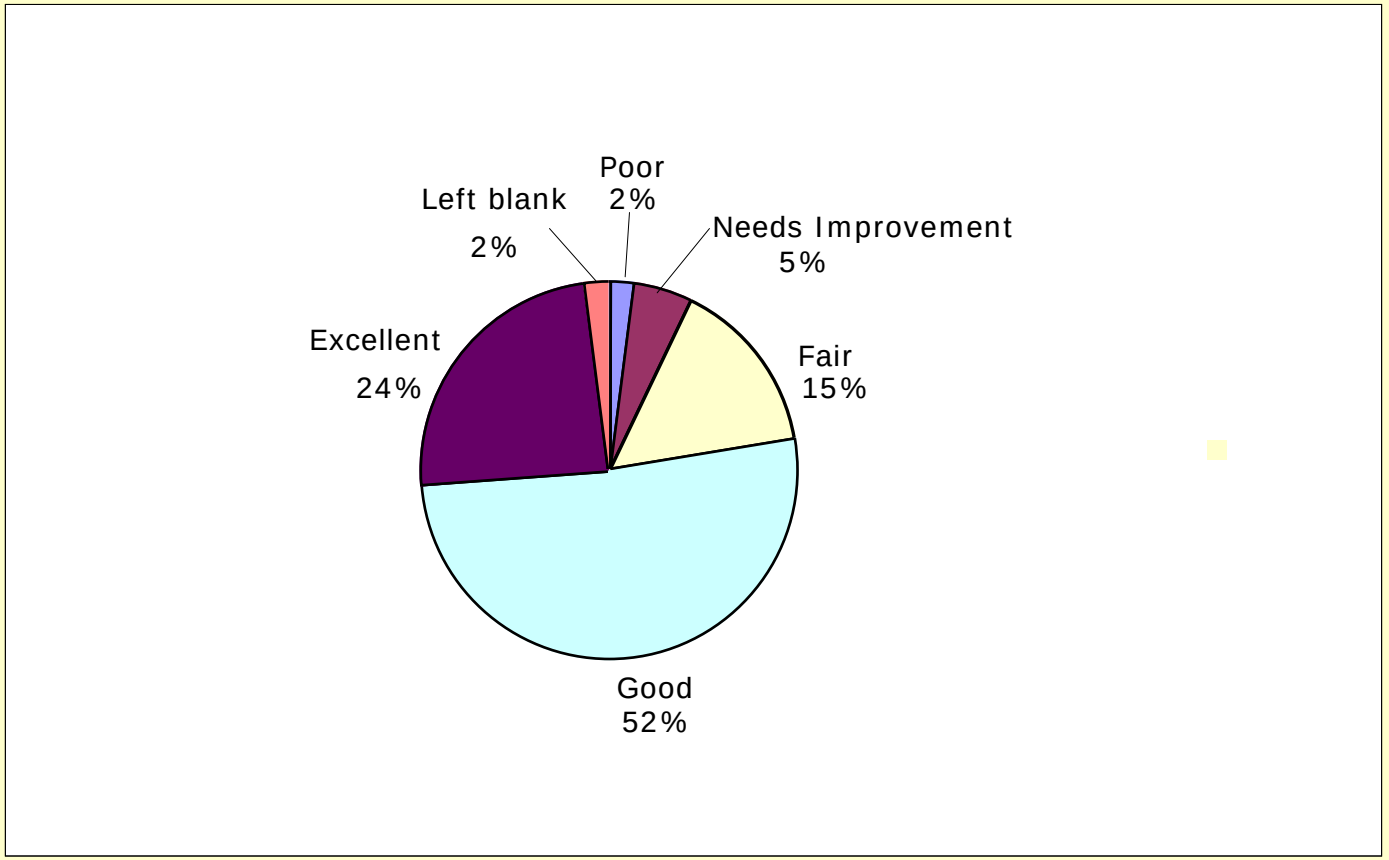
- Conferences
- Agency Support
- Access: On Duty
- Outside resources coming to community: EMSC
- Personal motivation

Difficult to obtain CME

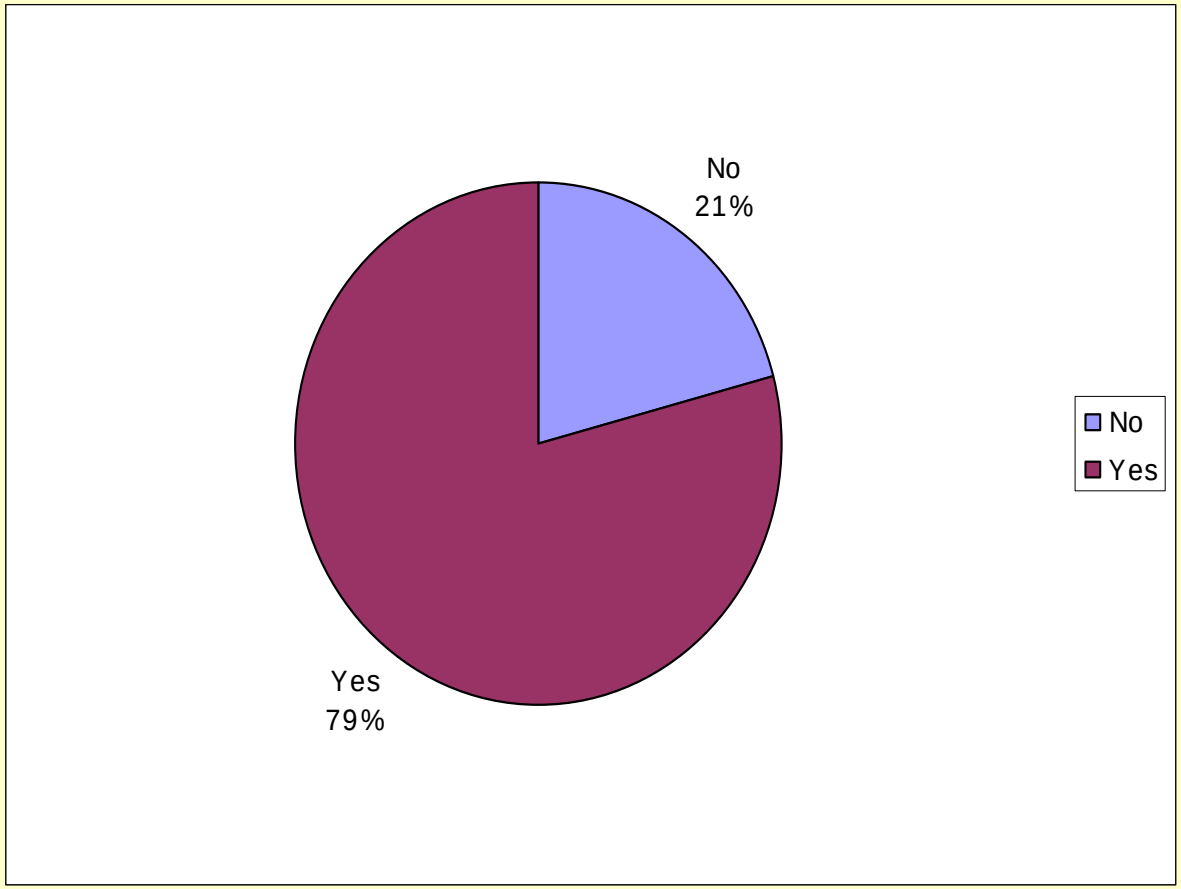
- Lack of resources:
  - Quality training
  - Quality teachers
- Access issues:
  - Time off of work and away from family
  - Distance to travel to class
  - Lack of agency support for CME

Education: Quality of Pediatric CME

76% of respondents rated the quality as excellent or good

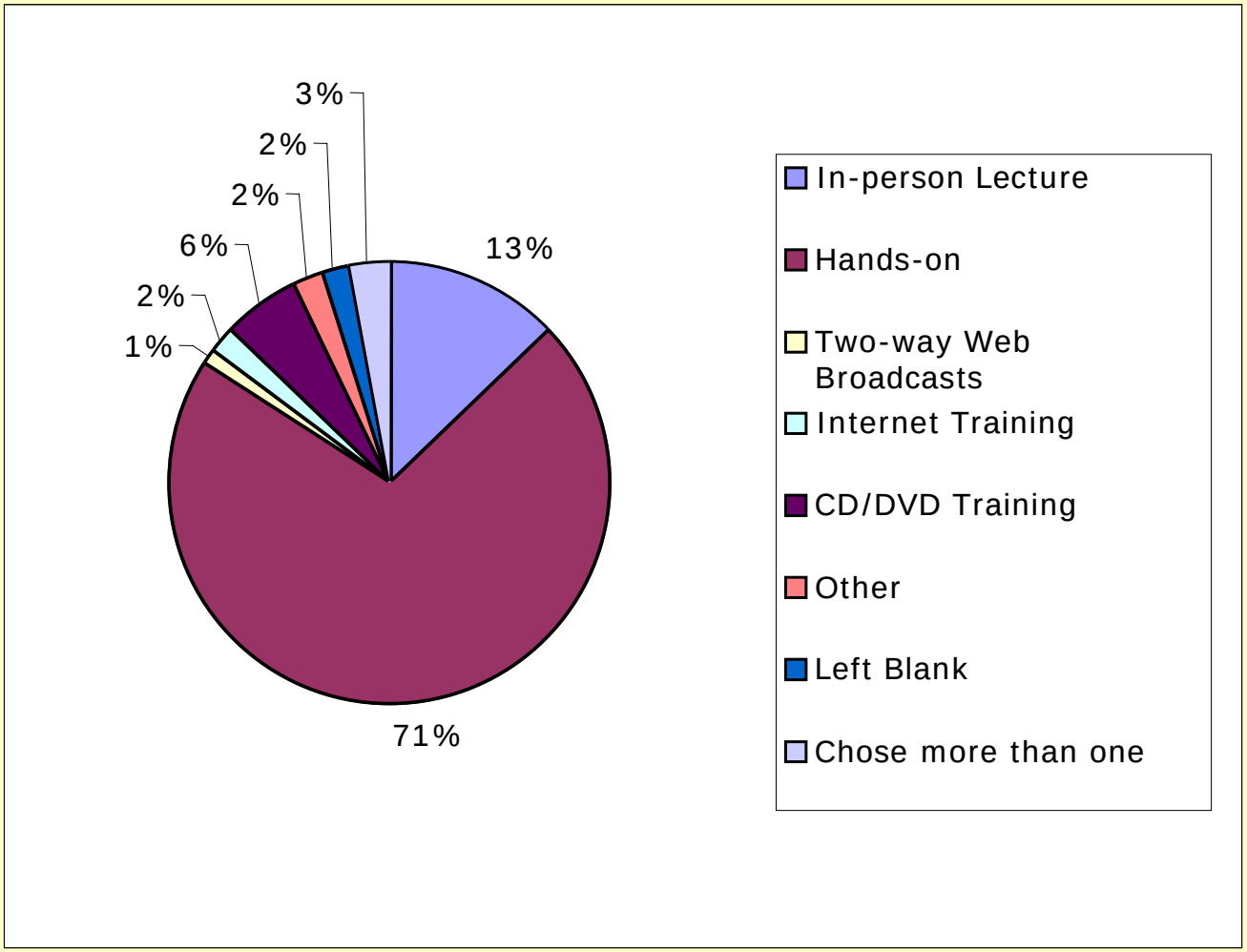


Access to resources to participate in a two-way web broadcast

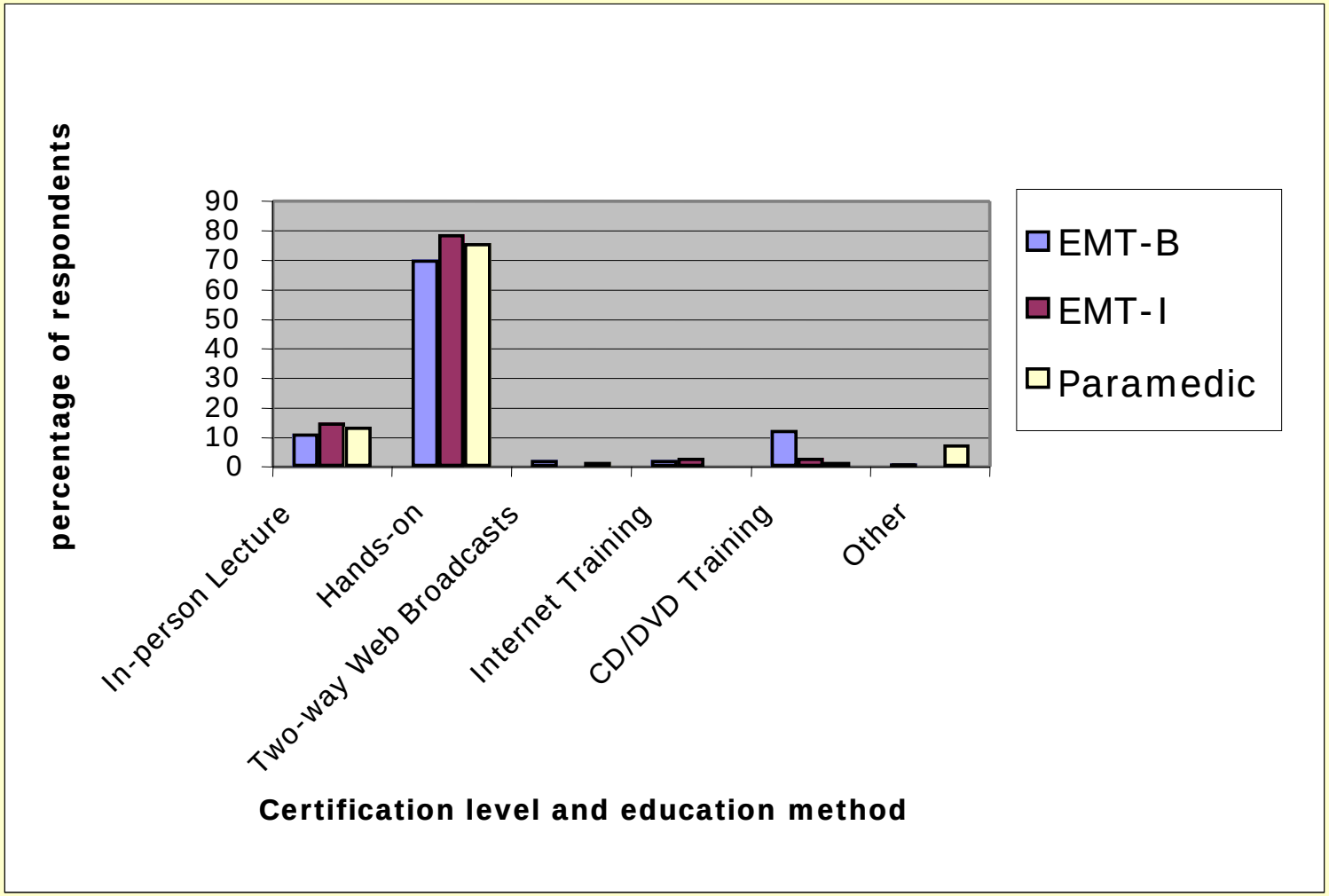


Education: Preferred Delivery Method

71 % of respondents preferred Hands-on Education



Education: Preferred delivery method by certification



EMT-B were more likely to prefer CD/DVD training than EMT-Is and Paramedics

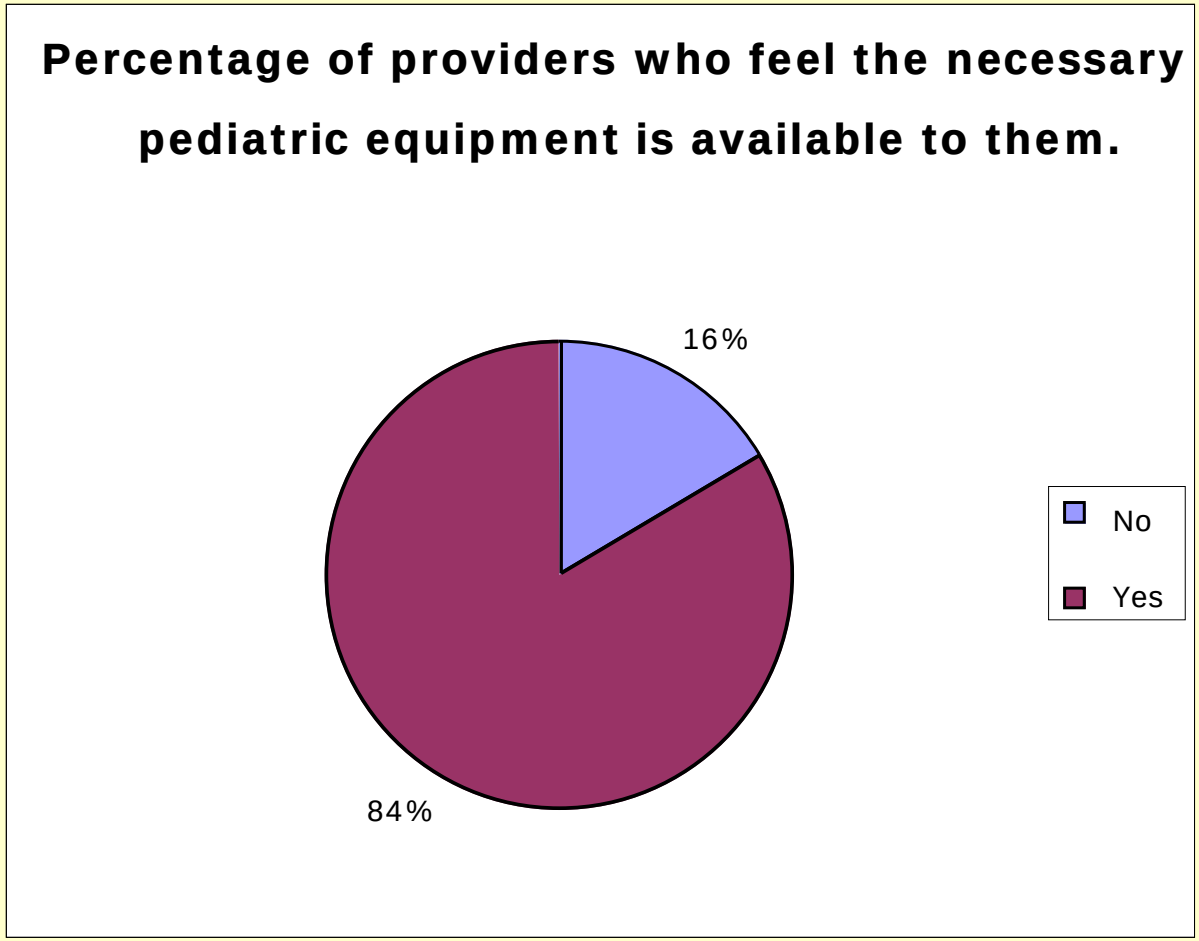
Implication of Education Findings for EMSC

- Develop and disseminate education modules to address top education needs of EMS Providers.
- Develop solid partnerships with Training Programs in order to address dissatisfaction with original pediatric training.
- Train EMSC Coordinators to increase their skill level so they can provide hands-on skill practice to EMS Providers in their area.

Implication of Education Findings for EMSC

- Share findings with EMSC Advisory Committee and partners to integrate education efforts.
- Partner with Primary Children's Medical Center in order to provide Simulation Lab opportunities and Computer Based Training modules for EMS Providers.
- Explore possibility of increasing CME hours for Paramedics & EMT-I.

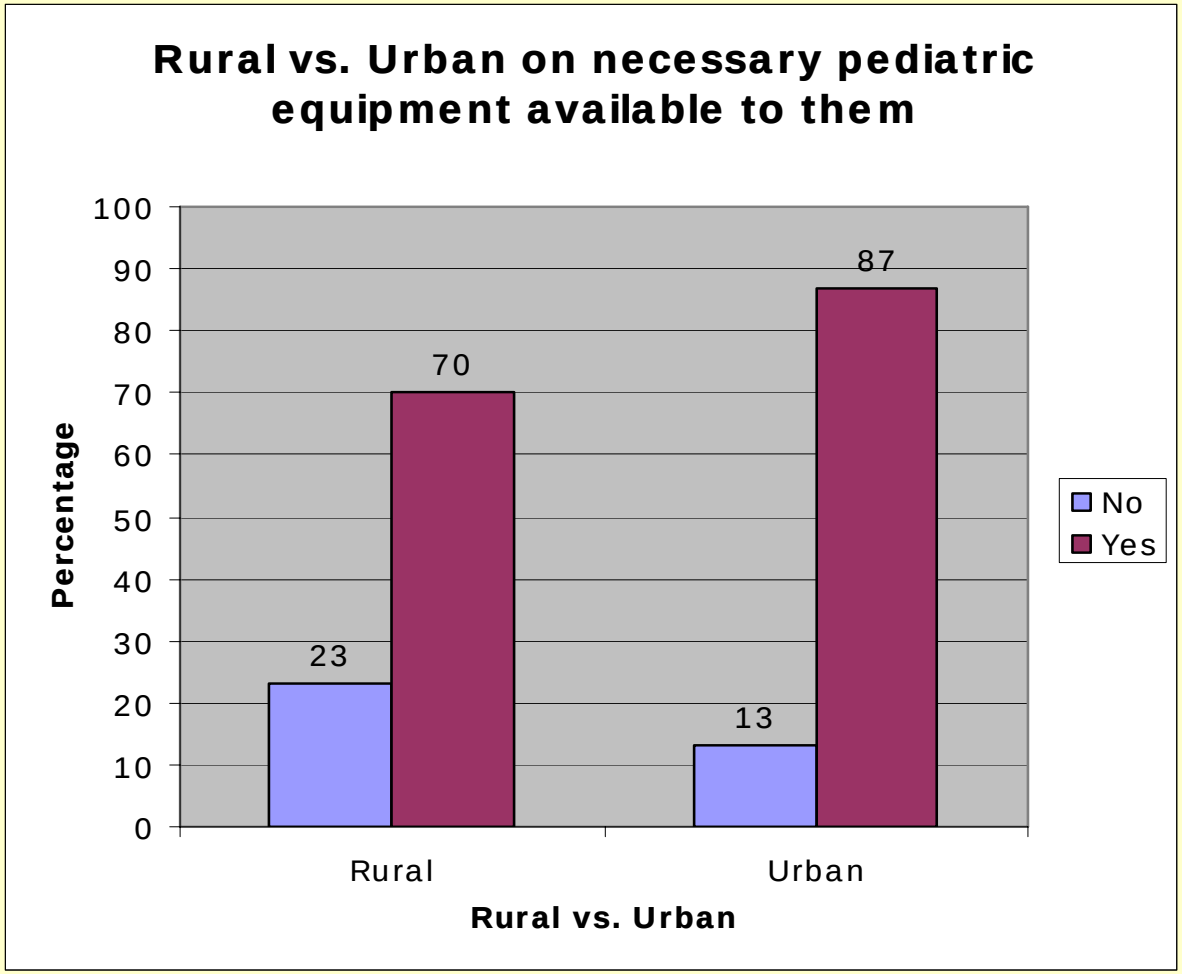
Pediatric Equipment: Availability



No difference was found between certification levels.

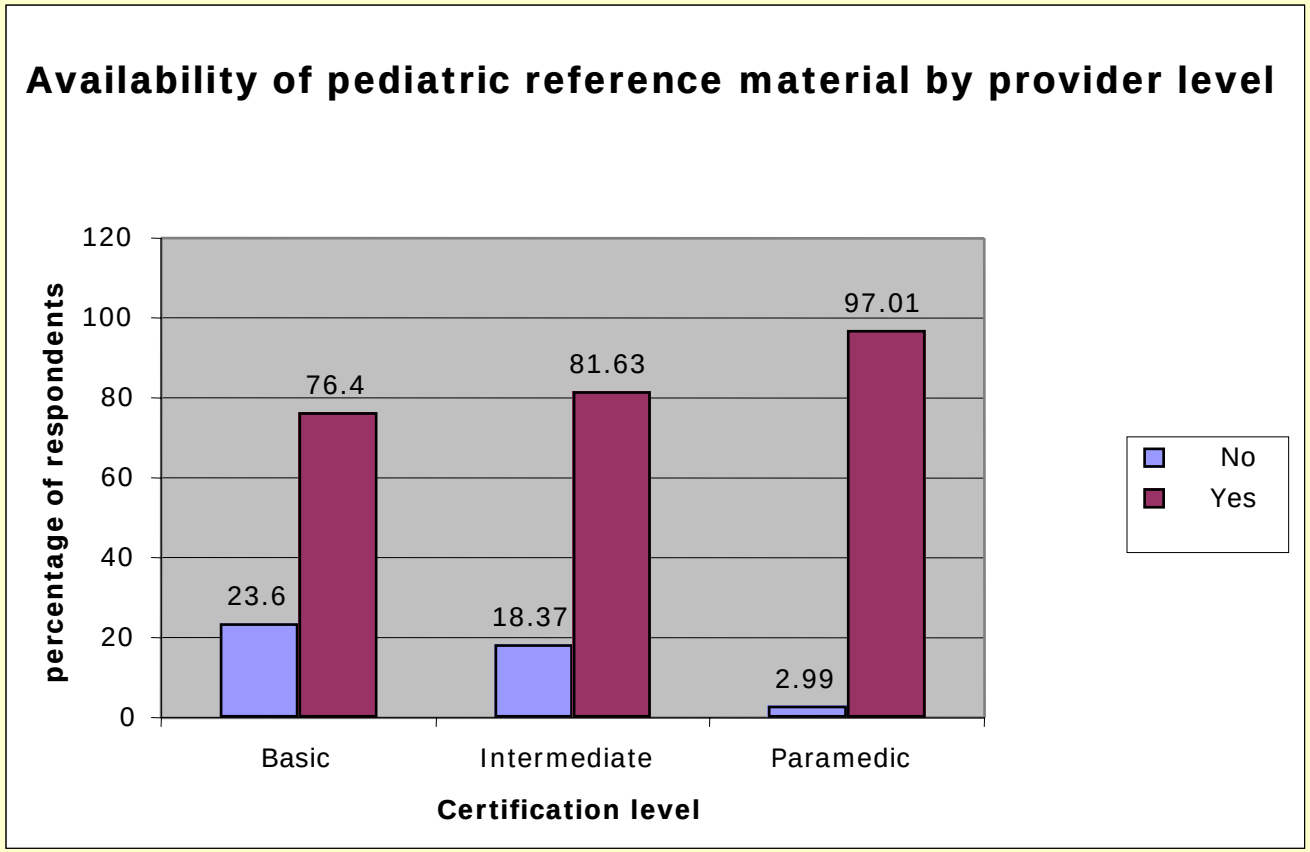
Pediatric Equipment: Availability

Rural providers were more likely than urban providers to feel that pediatric equipment was **not** available to them



Pediatric Equipment: Reference Material Availability

84% of providers felt the necessary pediatric reference material was available to them.



EMT-B and EMT-I were more likely than paramedics to feel the necessary pediatric reference material was not available to them.

Implications of Pediatric Equipment Findings for EMSC

- Broselow Program to distribute education and equipment to rural EMS Providers.

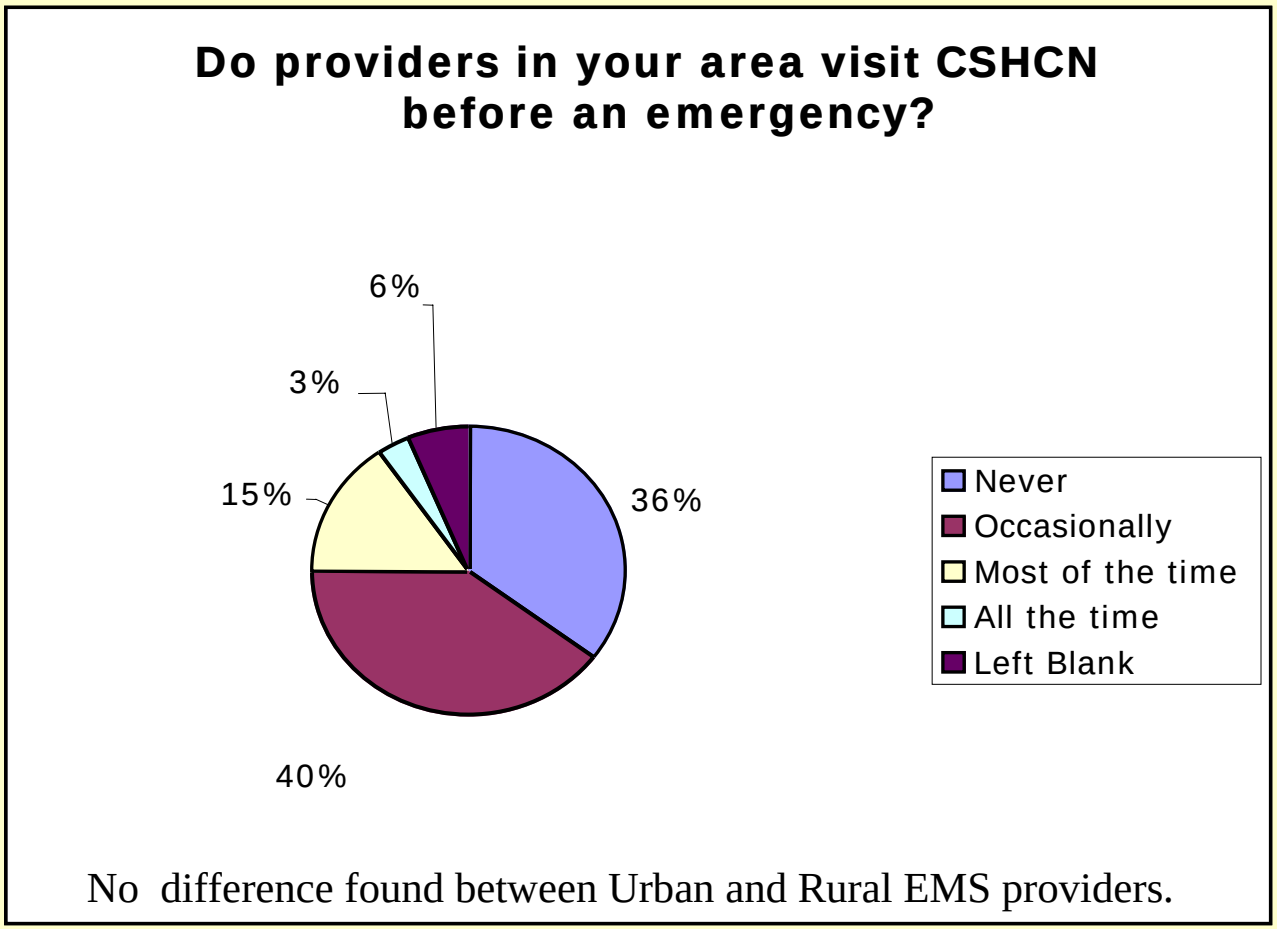
- National EMSC Performance Measure #66b addressing the percentage of pre-hospital provider agencies that have the essential pediatric equipment and supplies as outlined in the AAP/ ACEP joint guidelines for BLS and ALS ambulances.

  Requirement: By 2011, 90% of pre-hospital provider agencies will have the essential pediatric equipment and supplies.

- Link EMS agencies with funding sources to help them obtain pediatric equipment.

Children with Special Health Care Needs (CSHCN): EMS Visits

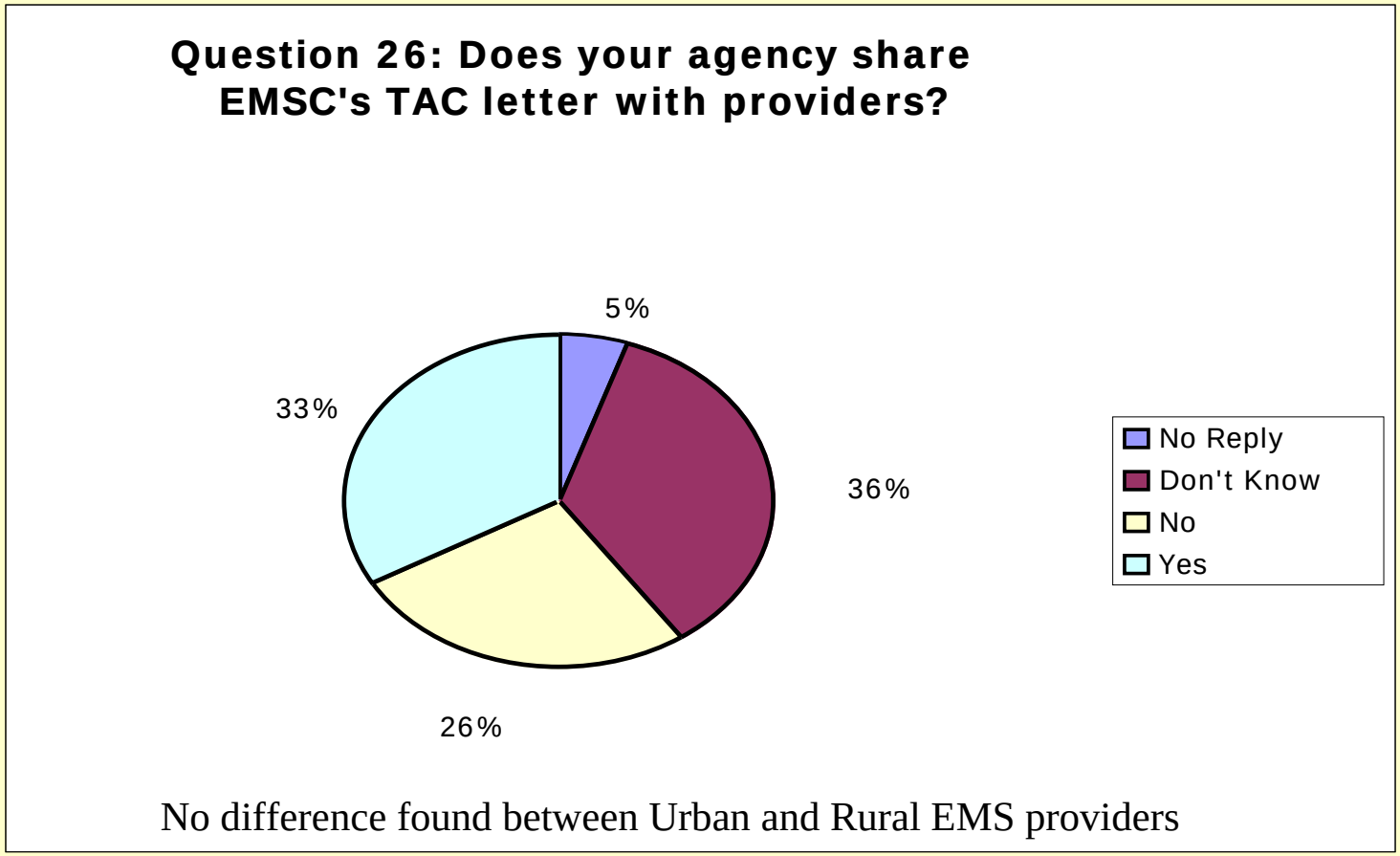
76% respondents rarely visit CSHCN in their area



No difference found between Urban and Rural EMS providers.

CSHCN: EMSC's Technology Assisted Child Letters

Only 33% of respondents reported their agency shared the TAC letter with providers



No difference found between Urban and Rural EMS providers

CSHCN: What resources would help you provide better care for CSHCN

1) Awareness

2) CME

3) System Changes

1) Awareness

- The need to know the presence of a CSHCN in their community
- The need to know the specific healthcare needs of a child before a call

❖ *"It would be nice to know if we have these special kids and to know of their situation - just in case - and so we can act quickly. We might hold a training on how to work with them before something happens."*

❖ *"Better communication/information about children in the area whether born with difficulties or coming home from the hospital with special needs. Sounds like that is improvement the agency needs to make!"*

❖ *"I think going out and talking with special health care children and their parents to find out their concerns and learn about their lives and challenges."*

2) CME

Comments focused on the need for the agency to provide general information on CSHCN in order to increase the knowledge base of EMS providers.

- *"Education and training - we have a small community. We do not have pediatric calls in this area often"*

- *"More in-service and hands-on. Maybe some provider from each agency (Instructors) could spend a day or two at PCMC with children who have special needs and bring back the knowledge and training."*

- *"Anything and everything, you can never know enough."*

3) System Changes

Comments in this area focused on larger system issues to address in order to improve the emergency care of CSHCN

- *"Just more pediatric equipment- we use it and send it to bigger hospitals and we sometimes don't get it back, so we go without until we buy more or find it."*

- *"Access to grant money to purchase equipment if needed to care for them"*

- *"What we need more than anything else is more EMT's"*

- *"Funding for parent or caretaker accompaniment on transports and hospital stays".*

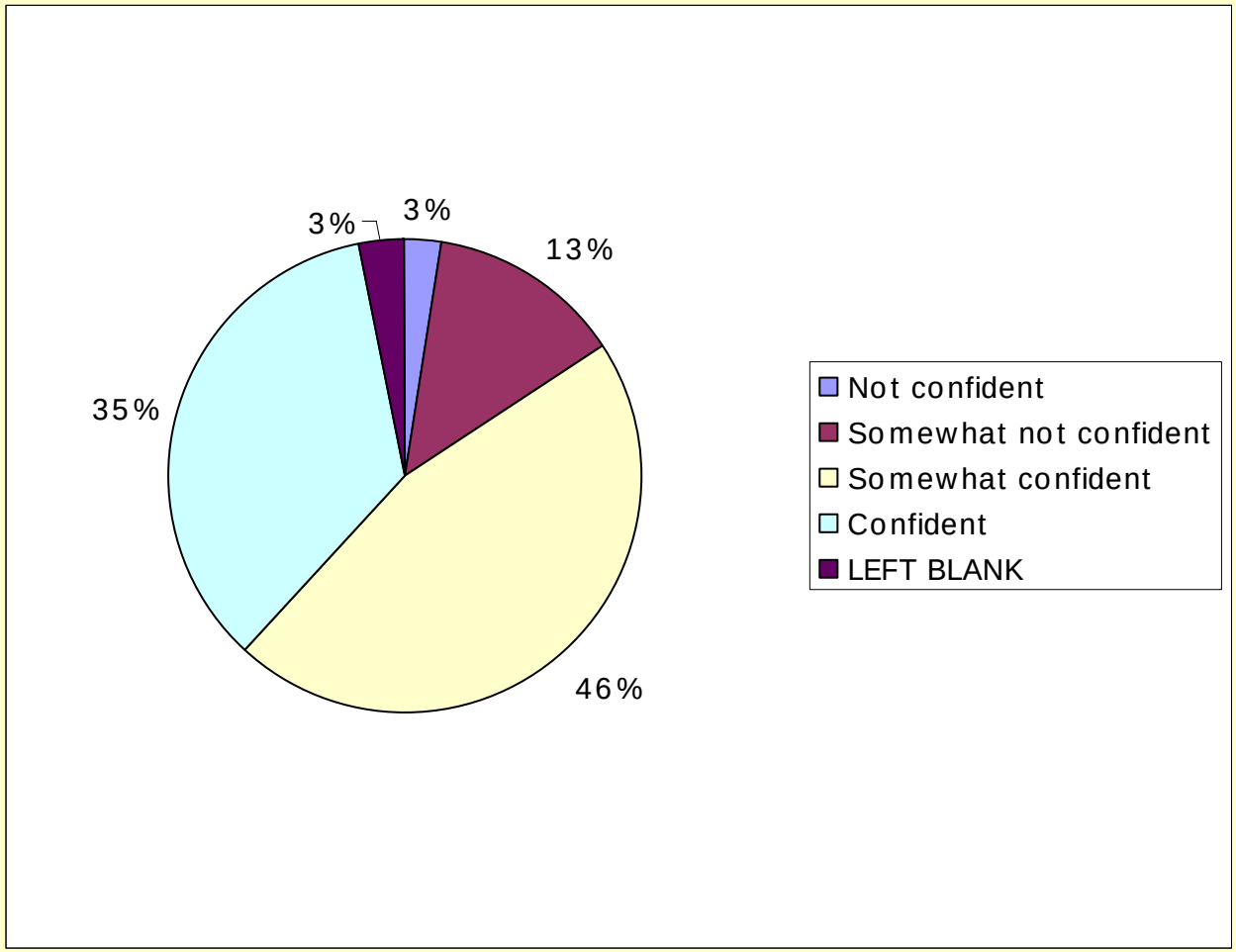
Implications of CSHCN Findings for EMSC

- Development and dissemination of education module for CSHCN
- Emergency Health Information Sheet Program
- Family Centered Care education

Implications of CSHCN Findings for EMSC

- Changed TAC letter so they are now received by the training officer at the agency, the primary physician, and an EMSC Coordinator in the area.
- EMSC Coordinators could serve as link to arrange visits with the CSHCN in their area.
- Targeted Issue Grant Application

Cultural Needs: How confident are you in your ability to meet the cultural needs of your patients?



What resources would help you address the cultural needs of your patients?

- Language resources
- Training in cultural education
- Tools to use to overcome cultural and language barriers

Language resources

"Incorporate Spanish 2nd language into initial training and ongoing training to meet the needs of our clientele."

"We see a lot of foreign travel in our area and the language barrier sometimes is a problem-so probably the availability of translators would help the most"

Training in Cultural Education

"Maybe a class / book on different cultures to better understand patient and parents and where they are coming from. So that we don't offend / and we say right things"

"Considerations of different customs and traditions that we may cross while treating a patient i.e. different religions and cultures."

Tools to overcome cultural and language barriers

- *"This is why I feel Broselow tapes and other specific pediatric equipment would be useful- in the event of a language barrier or other cultural difference these things would be less invasive."*

- *"Interpreter basic charts i.e. pain in several languages."*

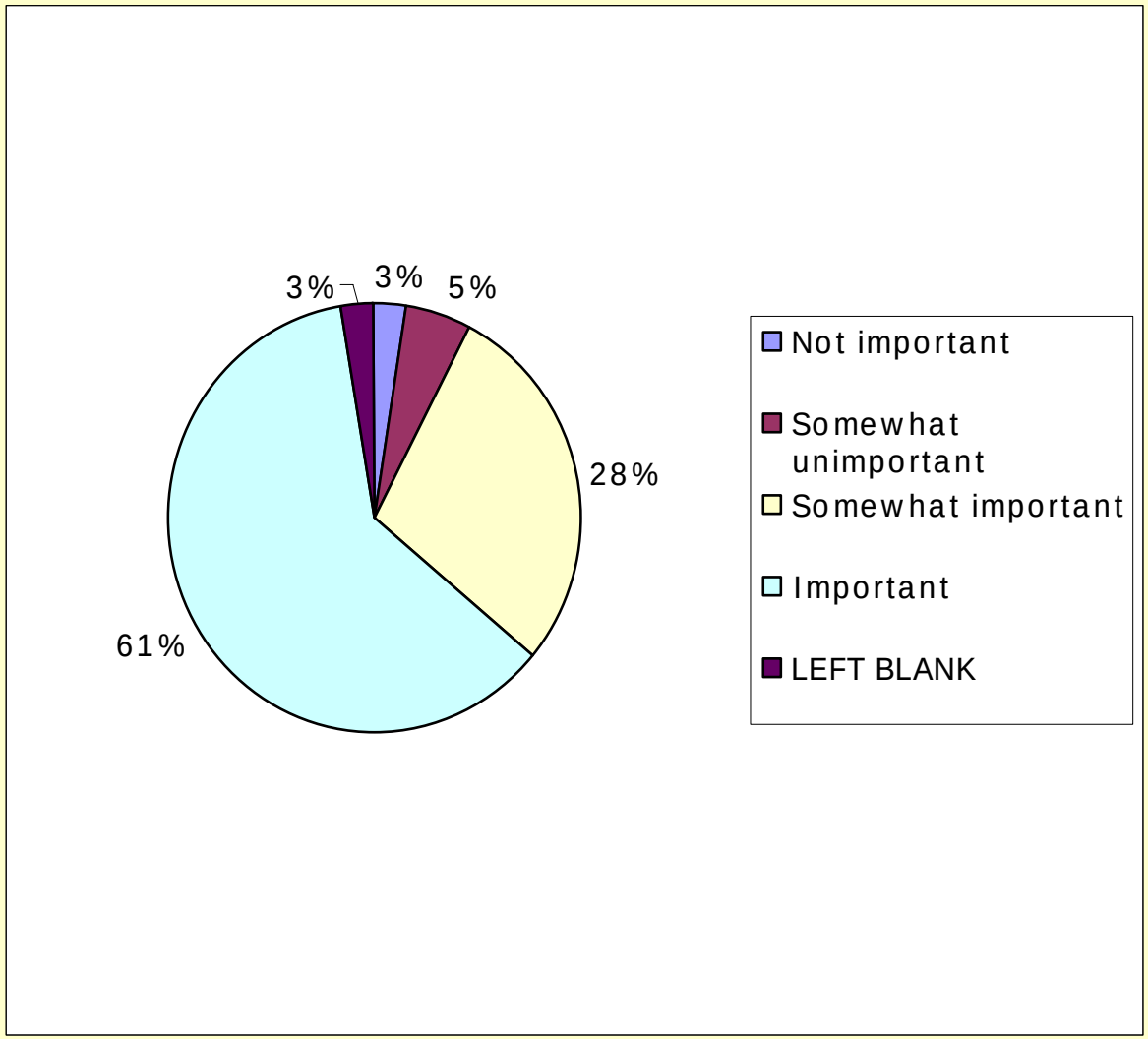
- *"A study of the cultural needs that people feel EMS is not providing in their medical care received."*

Implication of cultural competence findings for EMSC

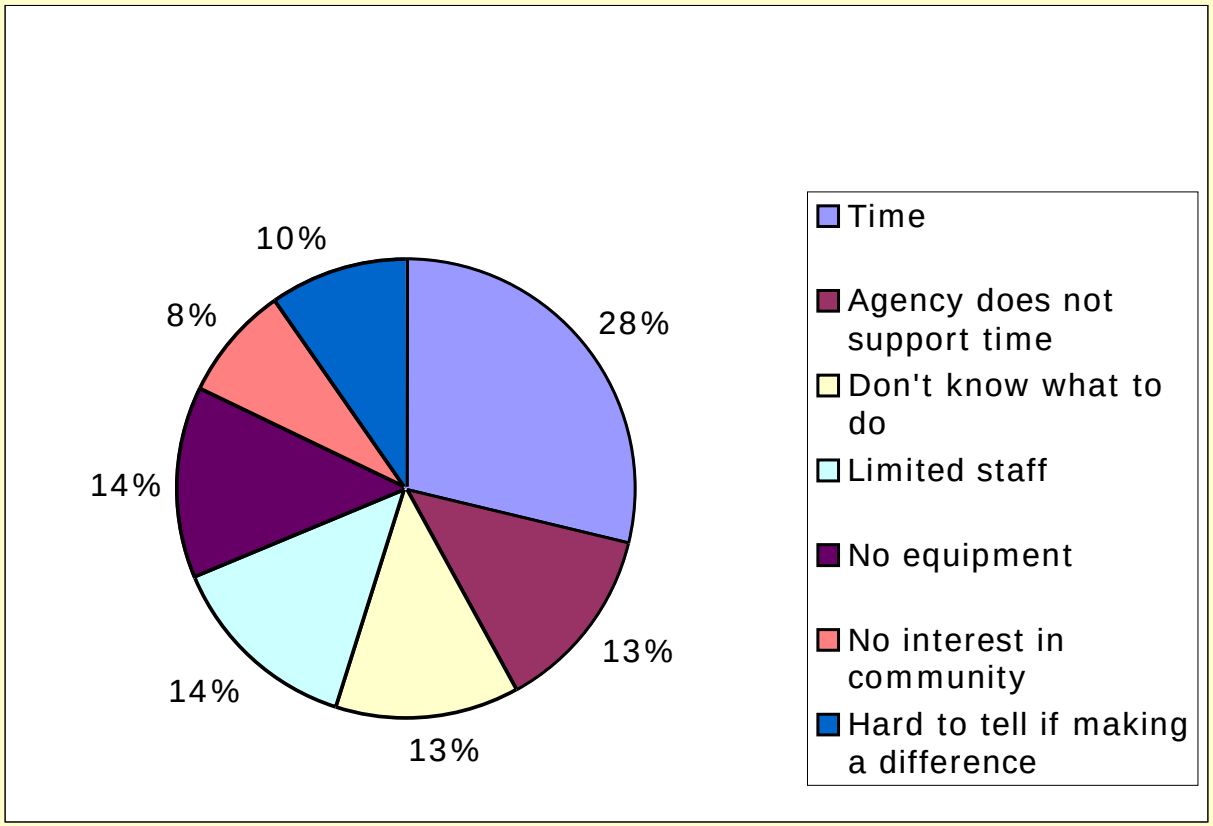
- Identify translation resources within the Bureau of EMS and IHC and work with them to determine solution to language and cultural resources needed by EMS Providers.

- Work with other EMSC Program Managers to identify training and education resources they have used to meet the language and cultural needs of their EMS Providers.

How important is it for you to conduct pediatric injury prevention activities?



What barriers do you face when conducting pediatric injury prevention activities?



Injury Prevention

1. Bike Safety (33%)
2. Child Restraints (24%)*
3. Auto Accidents (23%)
4. Water Safety (20%)
5. ATV Safety (19%)*
6. Helmets (15%)
7. Drugs / Alcohol / Overdose Prevention (13%)
8. Parent Safety Education (12%)
9. Board Safety –ski & skate (10%)
10. Abuse (8%) & Fire Safety (8%)^
11. Falls (7%)
12. General Sports (6%) & Trampolines (6%)

Implications of Injury Prevention Findings for EMSC

- Integrate injury prevention efforts with existing programs.
- Work with EMSC Coordinators to develop means to link EMS Providers to existing injury prevention resources in their community.
- Continue to support Bike Rodeo activities.
- EMSC Program Manager will continue to serve on SAFE Kids committee.
- Explore possibility of providing funding to support community EMS Providers' provision of injury prevention activities.

Wish List

- Training (123)
- Equipment (26)
- Injury Prevention (20)

Wish List: Training

- PEPP/PALS classes
- Time at Primary Children's Medical Center
- Pediatric CME presentations
- Education on CSHCN

Wish List: Equipment

- Broselow equipment

- Pediatric sized equipment:

  Oxygen saturation monitors

  Backboards

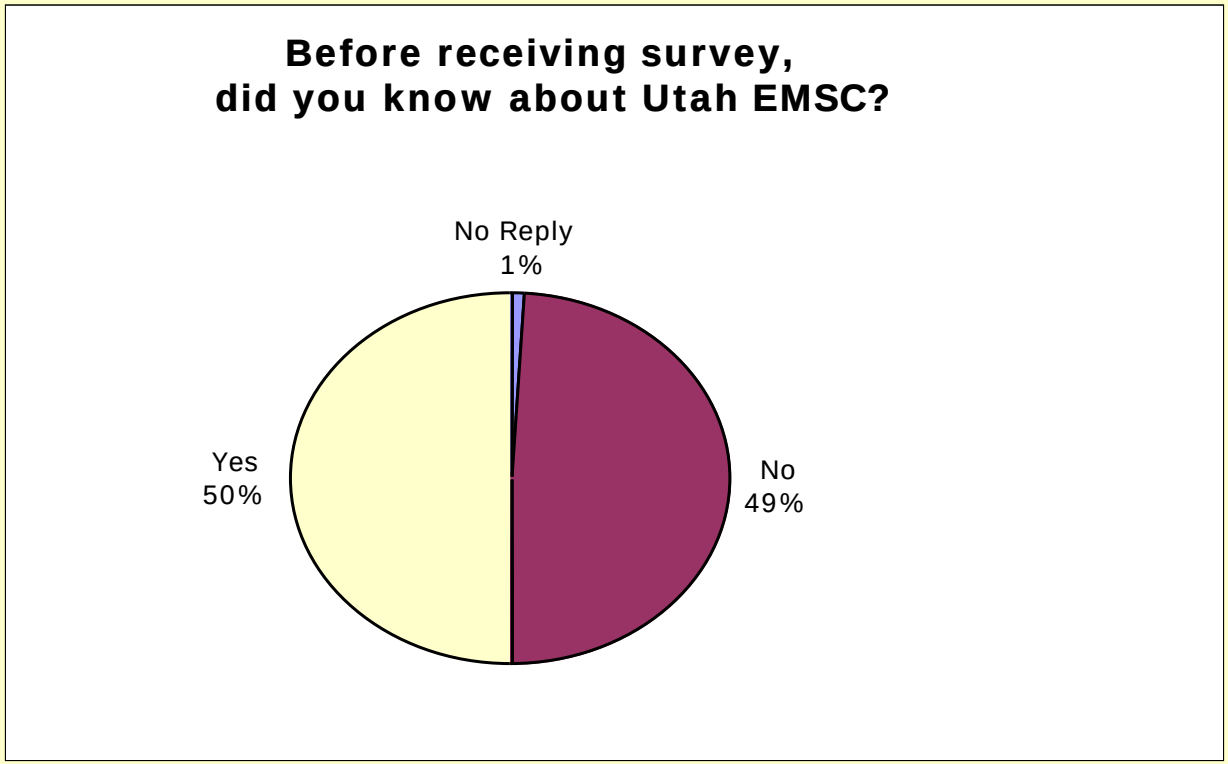
  Medication dosages

  Jump kits

Wish List: Injury Prevention

- Bike Rodeo trailers and bike safety
- Substance abuse
- Home safety
- Car seat safety
- Pedestrian safety
- General injury prevention support

EMSC Awareness: How do we get to 100%?



Education and Training, Marketing, EMSC Coordinators, Partnerships, & System Changes

Needs assessment results will be shared with EMS Providers via EMSC website